

(FILE 'HOME' ENTERED AT 17:09:00 ON 14 APR 2006)

FILE 'CAPLUS, EMBASE, USPATFULL' ENTERED AT 17:09:15 ON 14 APR 2006

L1        23401 FILE CAPLUS  
L2        22535 FILE EMBASE  
L3        14043 FILE USPATFULL  
TOTAL FOR ALL FILES  
L4        59979 S FIBRONECTIN  
L5        22728 FILE CAPLUS  
L6        4448 FILE EMBASE  
L7        49056 FILE USPATFULL  
TOTAL FOR ALL FILES  
L8        76232 S ALGINATE?  
L9        32 FILE CAPLUS  
L10      0 FILE EMBASE  
L11      284 FILE USPATFULL  
TOTAL FOR ALL FILES  
L12      316 S GLACIAL ACID

FILE 'REGISTRY' ENTERED AT 17:10:06 ON 14 APR 2006

L13      0 S GLACIAL ACID/CN  
L14      0 S GLACIAL ACID/CN  
L15      0 S GLACIAL ACID  
L16      149 S GLACIAL

FILE 'CAPLUS, EMBASE, USPATFULL' ENTERED AT 17:11:44 ON 14 APR 2006

L17      94532 FILE CAPLUS  
L18      615 FILE EMBASE  
L19      50733 FILE USPATFULL  
TOTAL FOR ALL FILES  
L20      145880 S GLACIAL ACETIC ACID OR 64-19-7/RN OR ACIOJEL OR ((ETHANOIC OR

FILE 'REGISTRY' ENTERED AT 17:13:52 ON 14 APR 2006

L21      0 S ALGINATE/CN  
L22      479 S ALGINATE  
L23      437 S ALGINIC ACID  
L24      1 S ALGINIC ACID/CN  
L25      146 S ALGINIC ACID (3A) SODIUM

FILE 'CAPLUS, EMBASE, USPATFULL' ENTERED AT 17:15:49 ON 14 APR 2006

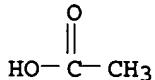
L26      94708 FILE CAPLUS  
L27      648 FILE EMBASE  
L28      53374 FILE USPATFULL  
TOTAL FOR ALL FILES  
L29      148730 S L4 AND (L8 OR (ALGINIC ACID)) OR L20  
L30      6 FILE CAPLUS  
L31      0 FILE EMBASE  
L32      246 FILE USPATFULL  
TOTAL FOR ALL FILES  
L33      252 S L4 AND (L8 OR (ALGINIC ACID)) AND L20  
L34      4 FILE CAPLUS  
L35      0 FILE EMBASE  
L36      145 FILE USPATFULL  
TOTAL FOR ALL FILES  
L37      149 S L33 AND WOUND  
L38      1 FILE CAPLUS  
L39      0 FILE EMBASE  
L40      2 FILE USPATFULL  
TOTAL FOR ALL FILES  
L41      3 S L4 (500A) (L8 OR (ALGINIC ACID)) (500A) L20  
L42      1 FILE CAPLUS  
L43      0 FILE EMBASE  
L44      2 FILE USPATFULL

TOTAL FOR ALL FILES  
L45        3 S L4 (500A) (L8 OR (ALGINIC ACID)) (500A) (L20 OR ACETIC)  
L46        7 FILE CAPPLUS  
L47        0 FILE EMBASE  
L48        85 FILE USPATFULL  
TOTAL FOR ALL FILES  
L49        92 S L4 AND (L8 OR (ALGINIC ACID)) (500A) (L20 OR ACETIC)  
L50        7 FILE CAPPLUS  
L51        0 FILE EMBASE  
L52        72 FILE USPATFULL  
TOTAL FOR ALL FILES  
L53        79 S L4 AND (L8 OR (ALGINIC ACID)) (50A) (L20 OR ACETIC)  
L54        0 FILE CAPPLUS  
L55        0 FILE EMBASE  
L56        3 FILE USPATFULL  
TOTAL FOR ALL FILES  
L57        3 S L53 AND FIBRONECTIN/CLM

=> save all  
ENTER NAME OR (END) :l10049992/l  
L# LIST L1-L57 HAS BEEN SAVED AS 'L10049992/L'

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L16 ANSWER 149 OF 149 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 64-19-7 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Acetic acid (7CI, 8CI, 9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN Aci-Jel  
CN E 260  
CN Ethanoic acid  
CN Ethanoic acid monomer  
CN Ethylic acid  
CN Glacial acetic acid  
CN Methanecarboxylic acid  
CN NSC 111201  
CN NSC 112209  
CN NSC 115870  
CN NSC 127175  
CN NSC 132953  
CN NSC 406306  
CN Vinegar acid  
FS 3D CONCORD  
DR 77671-22-8  
MF C2 H4 O2  
CI COM  
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOSIS,  
BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSHEM, CSNB, DDFU, DETHERM\*,  
DIOGENES, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT,  
ENCOMPPAT2, GMELIN\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*,  
MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*, PIRA, PROMT, PS, RTECS\*,  
SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

96004 REFERENCES IN FILE CA (1907 TO DATE)  
4986 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
96240 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=>

L24 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 9005-32-7 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Alginic acid (8CI, 9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN A 2830-9  
CN Acid Algin G 2  
CN Alginat 8  
CN Alginat LV  
CN Cecalgum S 500  
CN Duckacid X 2787  
CN E 400  
CN Grindsted PH 060  
CN Kelacid  
CN Kimika Acid G  
CN Lamitex LV  
CN Landalgine  
CN Norgine  
CN Protanal LF  
CN Satialgine  
CN Satialgine H 8  
CN Snow acid algin G  
CN Verdyol Super  
DR 545434-56-8, 210888-24-7  
MF Unspecified  
CI PMS, COM, MAN  
PCT Manual registration, Polyester, Polyester formed  
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOSIS, BIOTECHNO, CA,  
CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CHEMSAFE, CIN, CSCHEM,  
DDFU, DIOGENES, DRUGU, EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA,  
MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS\*,  
TOXCENTER, USAN, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

9793 REFERENCES IN FILE CA (1907 TO DATE)  
1916 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
9835 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=>

LE FOR THIS PATENT.

L53 ANSWER 73 OF 79 USPATFULL on STN

SUMM Further, as to the use of materials having undesirable defined cell binding properties, heparin is also not preferred to be linked to alginate in the composition due to its well known inhibition of the blood clotting mechanism. Heparan sulfate is also not preferred on the basis of its participation in cell-cell adhesion mechanisms. Heparan sulfate is linked to a membrane-bound proteoglycan that binds NCAM (neural cell adhesion molecule), thereby promoting homophilic cell adhesion(Cole et al, 1986). The heparan sulfate binding domain of fibronectin is responsible for the binding of neurons, lymphocytes and other cell types to fibronectin, in the process of cell-cell adhesion (Liao etal, 1988). Further, heparan sulfate proteoglycans found on cell surfaces and in the extracellular matrix are binding sites for the basic fibroblast growth factor(bFGF) (Moscatelli et al, 1988).

DETD Alcian Blue is a well known stain for chondroitin sulfate (Turnbull, 1993); we found that it also stains alginate, although with less intensity. Microcapsules were stained in 0.5% Alcian Blue in 2% acetic acid, for 20 min; de-staining was in 2% acetic acid, in repeated washings. Biodrin microcapsules give a deeper blue than alginate capsules, as expected. When Biodrin microcapsules prepared as in Example 8, are cut in half and stained, the interior of the capsules stains more intensively than the outside, indicating that the external membrane has an effect on the stain diffusion to the capsule interior.

DETD 6. Liao, N-S., St.John, J., McCarthy, J. B. and Furcht, L. T. and Cheung, H. T. (1988) Adhesion of Lymphoid Cells to the Carboxyl-terminal Heparin-binding Domains of Fibronectin. Exp. Cell Res. 181, 348-361.

ACCESSION NUMBER: 2001:142474 USPATFULL  
TITLE: Hetero-polysaccharide conjugate and methods of making and using the same  
INVENTOR(S): Mares-Guia, Marcos, Miami Beach, FL, United States  
Ricordi, Camillo, Miami Beach, FL, United States  
PATENT ASSIGNEE(S): Biomim, Inc. & University of Miami, Miami, FL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6281341	B1	20010828
APPLICATION INFO.:	US 1997-877682		19970617 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-45111P	19970430 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Fonda, Kathleen K.	
LEGAL REPRESENTATIVE:	Frommer Lawrence & Haug, Pan, Grace L.	
NUMBER OF CLAIMS:	62	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Figure(s); 5 Drawing Page(s)	
LINE COUNT:	1525	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.